

Schools and Universities

Extensive Studies Show:

- Students attending schools with poor indoor air quality score **11% lower on standardized tests** than those students attending schools in good condition, according to the U.S. Department of Education's Office of Education Research and Improvement
- A third or more of U.S. schools have **mold, dust, and other indoor air problems** serious enough to provoke respiratory issues like asthma in students and teachers
- An average of one out of every 10 school-age children has asthma, which is a **leading cause of school absenteeism**
- The economic cost of asthma amounts to more than **\$56 billion annually**, including direct medical costs from hospital stays and indirect costs (e.g. lost school and work days)
- Up to **65%** of asthma cases in school-aged children **could be prevented with proper IAQ**

Filtration Solutions



MEGApleat® M8
(see page 118)

Sources: *Creating healthy indoor air quality in schools*, U.S. Environmental Protection Agency, www2.epa.gov/iaq-schools; *Asthma Facts*, U.S. Environmental Protection Agency, Indoor Environments Division, Office of Air and Radiation, August, 2015



Critical Importance of Indoor Air Quality (IAQ)

IAQ is a primary concern for both schools and universities, due in part to the age and overall condition of a number of educational buildings. In 2014, the National Center for Education Statistics surveyed a sample of school districts and estimated that the average age of the nation's main school buildings was 55 years old. Additionally, nearly one-fourth of the nation's schools have one or more buildings in need of extensive repair or replacement, and nearly half have been reported to have problems related to IAQ. Students spend more than 1,300 hours in a school building each year and need to be protected.

The Air Inside These Facilities Can Contain:

- Molds, spores, pollens
- Carbon monoxide, radon, volatile organic compounds (VOCs)
- Bacteria, viruses, and byproducts
- Vehicle engine exhaust, exhaust from industrial plants
- Asbestos, clays, elemental particles, and man-made fibers

The health and comfort of students and teachers are among the many factors that contribute to learning and productivity in the classroom, which in turn affect performance and achievement. In addition, failure to respond promptly and effectively to poor indoor air quality in schools can lead to an increase in long-term health problems, costly repairs, and potential liability problems.

Optimize Your Environment

Quality air filtration system design, operation, and maintenance are critical for providing clean and healthy IAQ in schools. Properly functioning filtration systems clean the air of dirt, dust, pollen, dander, and fibers, control odors, and reduce the pollutants that cause most IAQ problems inside school buildings. In addition to improving occupant health and performance, regular HVAC maintenance also saves energy.

A thorough air filter audit of your HVAC Systems is the first step that AAF Flanders takes in order to provide you with professional guidance and analysis for cost savings and risk reduction. By conducting this audit, we will be able to understand your current state and then utilize TCO Diagnostic®, an advanced analytical software tool, to identify how you can improve air quality, energy savings, and operational flexibility while reducing total cost of ownership.